

In the Claims

Please amend allowable claim 4 to be an independent claim as follows:

4. A method of forming a deformed reinforcing bar splice comprising the steps of cutting a bar to length, cold working the bar end by radially cold forming the bar end at a section of the bar end, then forming a thread on the compressed bar end, with the threads being axially within the cold formed section, then threading an internally threaded sleeve onto two such formed and threaded bar ends to form a deformed reinforcing bar splice, wherein said threads are tapered and said sleeve has matching internal threads, and wherein said formed section extends beyond the tapered threads along the length of the bar.

Please amend allowable claim 6 to be an independent claim as follows:

6. A method of forming a deformed reinforcing bar splice comprising the steps of cutting a bar to length, cold working the bar end by radially cold forming the bar end at a section of the bar end, then forming a thread on the compressed bar end, with the threads being axially within the cold formed section, then threading an internally threaded sleeve onto two such formed and threaded bar ends to form a deformed reinforcing bar splice, wherein said threads are tapered and said sleeve has matching internal threads, said cold forming step forming a taper section on said formed section to facilitate threading, and said cold forming step forms a cylindrical section next to and at the larger end of said taper section; and then forming threads on said taper section.

Allowed claims 4 and 6 are presented in the listing of claims as independent, respectively, without underlining. They are presented herewith in underline form for the Examiner's convenience.

Please amend claim 1 as follows:

1. A method of forming a deformed reinforcing bar splice comprising the steps of cutting a bar to length, cold working the bar end by radially cold forming the bar end at a section of the bar end, then forming a thread on the compressed bar end, with the threads being ~~axially within~~ substantially shorter than the cold formed section, then threading an internally threaded sleeve onto two such formed and threaded bar ends to form a deformed reinforcing bar splice.

Please cancel claims 18-25.

Please add new claims 26-33 as noted in the listing of claims below.

Listing of Claims

1. (Currently Amended) A method of forming a deformed reinforcing bar splice comprising the steps of cutting a bar to length, cold working the bar end by radially cold forming the bar end at a section of the bar end, then forming a thread on the compressed bar end, with the threads being ~~axially within~~ substantially shorter than the cold formed section, then threading an internally threaded sleeve onto two such formed and threaded bar ends to form a deformed reinforcing bar splice.

2. (Original) A method as set forth in claim 1 wherein said threads are tapered and said sleeve has matching internal threads.

3. (Original) A method as set forth in claim 2 wherein said cold forming step forms a taper section on said formed section to facilitate threading.

4. (Currently Amended) A method of forming a deformed reinforcing bar splice comprising the steps of cutting a bar to length, cold working the bar end by radially cold forming the bar end at a section of the bar end, then forming a thread on the compressed bar end, with the threads being axially within the cold formed section, then threading an internally threaded sleeve onto two such formed and threaded bar ends to form a deformed reinforcing bar splice, wherein said threads are tapered and said sleeve has matching internal threads, and wherein said formed section extends beyond the tapered threads along the length of the bar.

5. (Original) A method as set forth in claim 4 wherein said formed section extends beyond the threads for at least about half the length of the threads.

6. (Currently Amendment) A method of forming a deformed reinforcing bar splice comprising the steps of cutting a bar to length, cold working the bar end by radially cold forming the bar end at a section of the bar end, then forming a thread on the compressed bar end, with the threads being axially within the cold formed section, then threading an internally threaded sleeve onto two such formed and threaded bar ends to form a deformed reinforcing bar splice, wherein said threads are tapered and said sleeve has matching internal threads, said cold forming step forming a taper section on said formed section to facilitate threading, and said cold forming step forms a cylindrical section next to and at the larger end of said taper section; and then forming threads on said taper section.

7. (Original) A method as set forth in claim 1 wherein said forming step comprises radial compression of the bar flattening any deformations thereon.

8. (Original) A method as set forth in claim 7 wherein said bar is radially compressed at least twice with the bar axially rotated between compressions.

9. (Original) A method as set forth in claim 8 wherein the bar is radially compressed between dies substantially half round and having a radius approximately that of the nominal diameter of the bar.

10. (Original) A process for forming a deformed bar end used in concrete construction comprising the steps of cutting the bar end, then radially cold forming the bar end by pressing the bar end to remove the deformations at the bar end and to cold work the bar end while circularizing the bar end, and threading the radially pressed section of the bar end to receive a threaded sleeve coupler, the length of radial cold forming being substantially longer than the threads so that the mouth of the coupler will be positioned on a pressed area of the bar extending beyond the mouth of the coupler.

11. (Original) A process as set forth in claim 10 wherein the pressed area of the bar end extending beyond the mouth of the coupler is from about $\frac{1}{3}$ to about $\frac{2}{3}$ the axial length of the threads.

12. (Original) A process as set forth in claim 11 wherein the pressed area of the bar not threaded is from about $\frac{1}{3}$ to about $\frac{2}{3}$ the total pressed area of the bar.

13. (Original) A process as set forth in claim 10 wherein said threads are tapered.

14. (Original) A process as set forth in claim 10 wherein said threads are parallel.

15. (Original) A process as set forth in claim 10 wherein said cold forming the bar end also straightens the bar end.

16. (Original) A process as set forth in claim 10 wherein said cold forming the bar end forms a tapered and adjacent cylindrical cold worked section of the bar end.

17. (Original) A process as set forth in claim 16 wherein the adjacent cylindrical section extends from the large end of the taper for about $\frac{1}{3}$ to about $\frac{2}{3}$ or more the length of the taper.

18 - 25 (Cancelled)

26. (New) A method of forming a deformed reinforcing bar connection comprising the steps of cutting a bar to length, cold working the bar end by radially compressing and cold forming the bar end, then forming a thread on the compressed bar end, with the threads being axially shorter than the length of the cold formed section, then seating the threaded bar end into the mouth of an internally threaded sleeve to form a deformed reinforcing bar connection.

27. (New) A method as set forth in claim 26 wherein said threads are tapered and said sleeve has matching internal threads.

28. (New) A method as set forth in claim 27 wherein said cold forming step forms a taper section on said cold formed section to facilitate taper threading.

29. (New) A method as set forth in claim 28 wherein said compressed and cold formed bar end section extends beyond the mouth of the sleeve.

30. (New) A method as set forth in claim 29 wherein said compressed and cold formed section extends beyond the threads on the bar end for at least about half the length of the threads.

31. (New) A method as set forth in claim 32 wherein said compressing and cold forming step forms a cylindrical section next to and at the larger end of said taper section.

32. (New) A method as set forth in claim 26 wherein said compressing and cold forming step comprises radial compression of the bar flattening any deformations thereon.

33. (New) A method as set forth in claim 32 wherein said bar is radially compressed at least twice with the bar axially rotated between compressions.